



Iowa DOT

Bicycle & Pedestrian Long-Range Plan

MPO/RPA Quarterly Meeting

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December 3, 2014

Scope of the Plan



- Public Participation
- Existing Conditions Assessment
- Bicycle & Pedestrian Facility Recommendations
- Funding & Implementation Strategies
- Plan Development



Existing Conditions Analysis



- **Context**
- Crash Analysis
- On-Road Bicycle Compatibility

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- A photograph of two cyclists riding on a paved road. The cyclist in the foreground is wearing a blue shirt and khaki shorts, riding a red road bike. The cyclist in the background is wearing a yellow and black jersey. The road is lined with green trees and a white fence.
- **Demographics**
 - **Percentage of Users**
 - **Road System**
 - **Traffic Volumes**
 - **Miles of Multi-Use Trails**

Existing Conditions Analysis



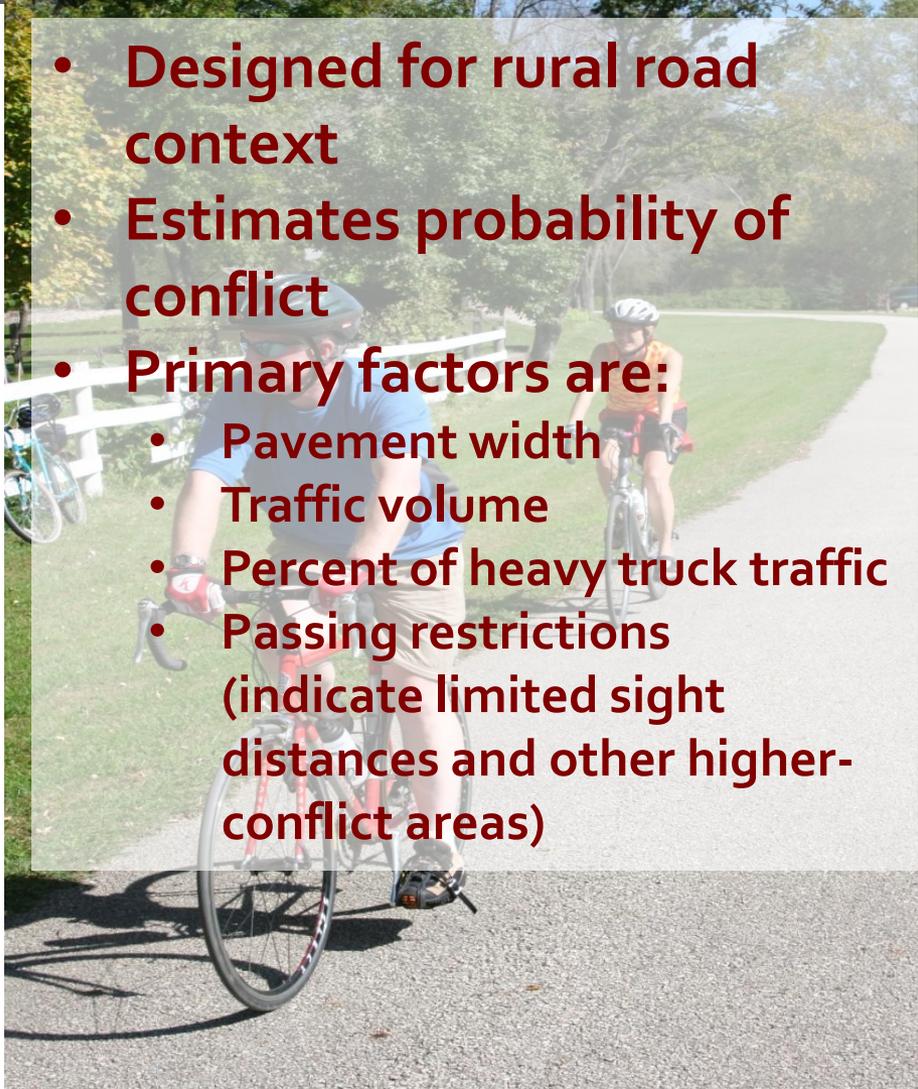
- Context
- **Crash Analysis**
- On-Road Bicycle Compatibility

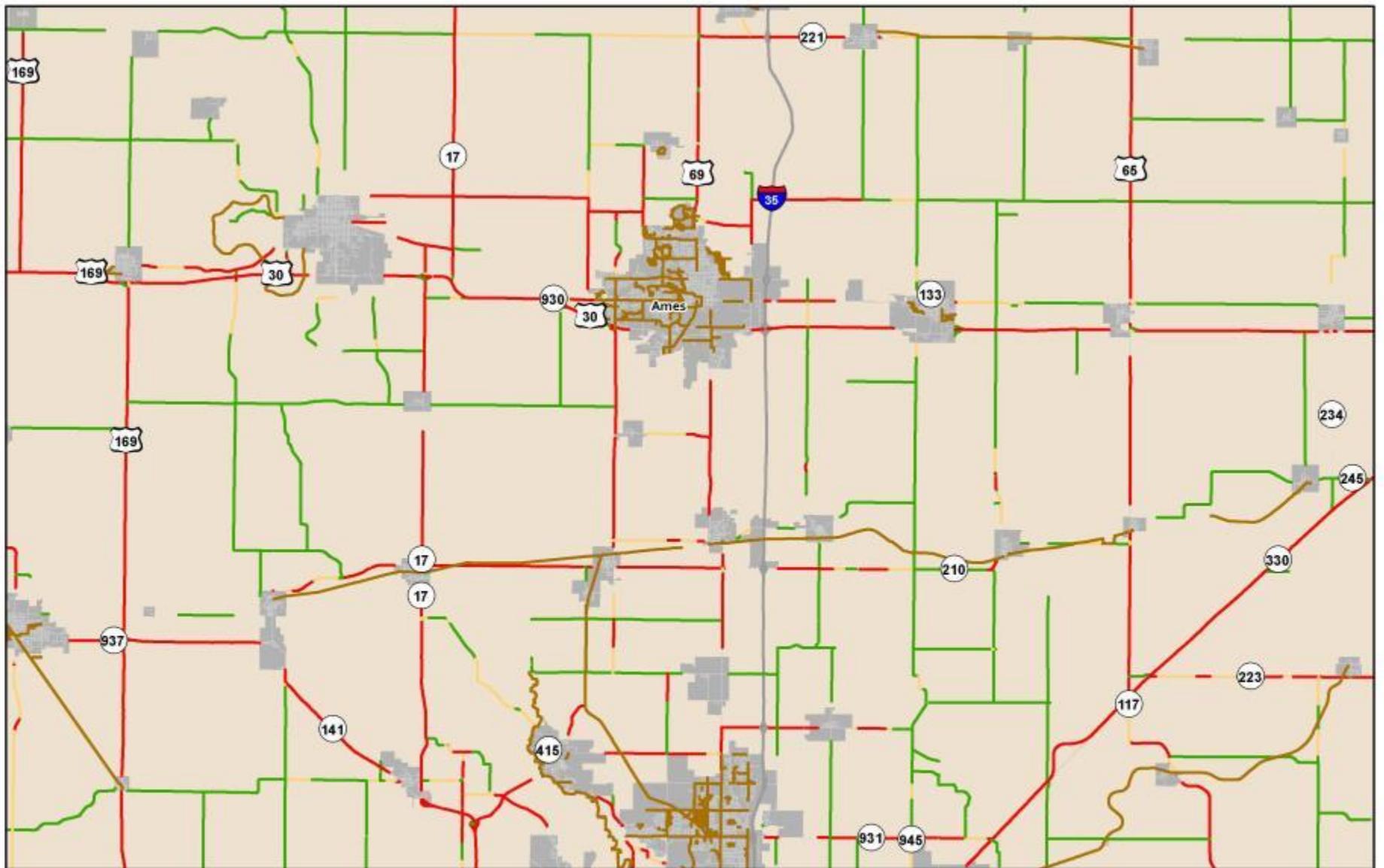
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- A photograph of two cyclists riding on a paved path. The cyclist in the foreground is wearing a blue shirt and a helmet, leaning forward on the handlebars. The cyclist in the background is wearing an orange vest and a helmet. The path is surrounded by green grass and trees.
- **Bicycle and Pedestrian Crashes (2008-2012)**
 - **Crash severity**
 - **Age of the rider**
 - **Urban vs. Rural Crashes**
 - **Road Type**
 - **Seasonal Effect**

Existing Conditions Analysis



- Context
- Crash Analysis
- **On-Road Bicycle Compatibility**

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- A photograph of two cyclists riding on a paved path. The cyclist in the foreground is wearing a blue shirt and a black helmet, riding a red and black road bike. The cyclist in the background is wearing an orange shirt and a white helmet, riding a silver road bike. The path is bordered by a white fence and green grass, with trees in the background.
- **Designed for rural road context**
 - **Estimates probability of conflict**
 - **Primary factors are:**
 - Pavement width
 - Traffic volume
 - Percent of heavy truck traffic
 - Passing restrictions (indicate limited sight distances and other higher-conflict areas)



 **Bicycle & Pedestrian Long-Range Plan**

On-Road Bicycle Compatibility



0 1 2 4 6 Miles January 2, 2024

On-Road Bicycle Compatibility Rating

- Good
- Moderate
- Poor
- Bicycles Prohibited
- Other Roads
- Multi-Use Trail

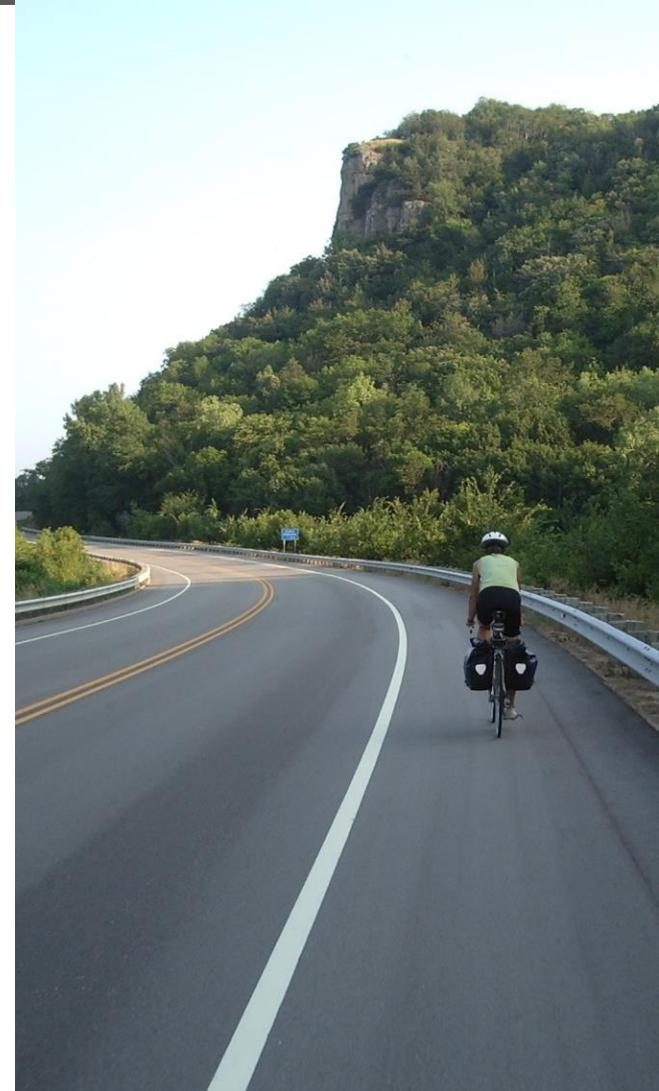
All Data Provided by Iowa DOT Unless Noted.
 On-Road Bicycle Compatibility ratings were determined based on Iowa DOT's 2012 GIMS data using the Wisconsin Department of Transportation's Rural Bicycle Planning Guide methodology.

What have we been working on?



Complete Streets Approach

- Clear guidance for when accommodations may be omitted.
- Modify Design Criteria Worksheets and Typical Roadway Sections to default to including accommodations
- Modify Design Decision Documentation to require justification of omission
- Include bike/ped person on scoping team



What have we been working on?



Ensure adequate and consistent accommodation design.

- On-road Bikeways section for the Design Manual (coordinate with SUDAS).
- Modify/clarify paved shoulder policy and standard road plan files, noting minimum effective paved shoulder width from rumbles.
- Increase Central Office's ability to provide technical assistance – possibly add an engineer to focus on bike/ped design.
- Facility selection guide to aid designers.



What have we been working on?



Facility Selection Guide

	Description	Users	Context	Posted Speed Limit	Motor Vehicle Traffic Volume	Other Considerations
Bike Lanes	4- to 6-foot wide lanes designated for exclusive use by bicyclists. Typically applied to arterial and collector streets where volumes and/or speeds would otherwise discourage bicycling. May include striped buffers or physical barriers for further separation.	Bicyclists	Urban	30 mph or higher.	Varies, but typically 3,000 ADT or greater.	Where motor vehicles are allowed to park adjacent to bike lane, provide a bike lane of sufficient width to reduce probability of conflicts due to opening vehicle doors and objects in the road. Analyze intersections to reduce bicyclist/motor vehicle conflicts.

What have we been working on?



Bicycle and Pedestrian Facilities and Treatments



Curb ramps provide transition between sidewalks and crosswalks and must be installed at all intersection and midblock pedestrian crossings, as mandated by federal legislation (1973 Rehabilitation Act and ADA 1990). All newly constructed and altered roadway projects must include curb ramps. Agencies with more than 50 employees are required to have a transition plan in place to address the staging of the curb ramp upgrades.

Basic Design Parameters – The design parameters of individual curb ramps are relatively complex and are explicitly stated in the Iowa DOT Design Manual. Separate curb ramps should be provided for each crosswalk at an intersection rather than a single ramp at a corner for both crosswalks. The separate curb ramps improve orientation for visually impaired pedestrians by directing them toward the correct crosswalk.

What have we been working on?



Performance Measures and Input Measures

- Pedestrian Measures
 - Usage - mode share
 - Safety - crashes per year
 - Accessibility - Percent of sidewalks and paths along primary and secondary roads that are ADA-compliant
- Bicycle Measures
 - Usage - mode share
 - Safety - crashes per year
 - Accessibility - Percentage of rural and urban roads suitable for bicycling

Input-Measure →	Baseline	Metric	Target	Related-Goal	Who-Measures-or-Implements
Modify the Design Manual to uniformly comply with the latest version of national standards and best practices (AASHTO Guide for the Development of Bicycle Facilities).	n/a	Modify all relevant sections of the Design Manual.	Modification complete by 2016.	Coordinated, Well-Designed	Iowa DOT

What have we been working on?



- Statewide Network Recommendations.
- Project Costs
- Funding
- Implementation



What's Next?



- Finalize internal comments on Draft Plan.
- Meeting with Highway Division Management Team.
- Meeting with Iowa DOT Director
- One more set of meetings with Policy and Technical Committees.
- Draft Plan for public input – Spring of 2015

